REMARKS

CLAIMS 1-8 AND 10-12

As amended, independent claim 1 provides a speech recognition interface for a speech recognition engine. The interface comprises a compiler that produces a binary grammar from a markup language grammar written in a markup language. The markup language grammar comprises rule tags that delimit a grammar structure that may be referenced by other grammar structures within the markup language grammar by name attribute of the rule tags. The name attribute is set within one of the rule tags. A grammar engine provides the binary grammar to the speech recognition engine.

Claims 1-8 and 10-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown et al. (U.S. Patent Number 6,587,822, hereinafter Brown) in view of Ladd et al. (U.S. Patent Number 6,470,317, hereinafter Ladd), and further in view of Parks (U.S. Patent Number 6,038,573).

As amended, independent claim 1 is not shown or suggested by the combination of Brown, Ladd and Parks. In particular, none of the references show or suggest rule tags that delimit a grammar structure that may be referenced by a name attribute of the rule tags, where the name attribute is set within one of the rule tags. In particular, Parks does not show a name attribute set within a rule tag. Instead, Parks uses the Backus-Naur notation to describe a grammar. Under Parks, each grammar rule describes sequences of tags and text that can be found in a news story document. The tags do not include name attributes that allow structures delimited by the tags to be referenced in other grammar structures. In fact, the tags shown in Parks do not include any attributes whatsoever.

By providing name attributes in rule tags, the invention

of claim 1 provides a simple way to define a grammar without relying on the Backus-Naur format. As noted in the specification, the Backus-Naur format is complicated to use and makes it difficult to understand the structure of a grammar.

Since none of the cited references show or suggest rule tags that have a name attribute set within one of the rule tags that can be used to reference a structure delimited by the rule tags, the combination of the cited references does not show or suggest the invention of claims 1-8 and 10-12.

CLAIMS 13, 14 AND 16-29

Claims 13, 14, 16-18, 20 and 22-29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Brown in view of Ladd and further in view of Parks. Claims 19 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown in view of Ladd, further in view of Parks and further in view of Martin (U.S. Patent Number 5,642,519).

As amended, claim 13 is directed to a computer-readable medium having instructions comprising an application providing a speech interface that expects to receive speech from the user as possible input. A speech grammar associated with the application is also provided and defines valid word patterns for the user's speech. The speech grammar is written in a markup language such that a start tag and an end tag having a first tag name that delimit a set of elements of the grammar are located between a second start tag and a second end tag that have a second tag name. The speech grammar comprises rule tags that delimit a valid grammar structure for the grammar and that comprise a name attribute that is set equal to a name by which the grammar structure can be referenced. The name attribute is set within a rule tag.

As amended, claim 13 is not shown by the combination of

Brown, Ladd, Parks and Martin. In particular, none of the cited references show a rule tag that delimits a grammar structure and that has a name attribute defined within it where the name attribute is set equal to a name by which the grammar structure can be referenced. In particular, Parks and Martin do not show such rule tags. In particular, neither of these references shows a rule tag that has a name attribute set within it.

Since none of the cited references provide rule tags that delimit a valid grammar structure and that comprise a name attribute set within the rule tag, the combination of these references does not show or suggest the invention of claims 13, 14 or 16-29.

CLAIMS 30-43

Claims 30-43 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown in view of Ladd and further in view of Parks.

Independent claim 30 is directed to a method of defining a grammar for speech recognition. The method includes delimiting a grammar structure with rule tags that conform to a markup language. The method further includes delimiting all of the rule tags for the grammar with grammar tags that conform to a markup language.

None of Brown, Ladd or Parks show or suggest delimiting a grammar structure with rule tags that conform to a markup language and then delimiting all the rule tags for the grammar with grammar tags that conform to a markup language. As such, the combination of Brown, Ladd and Parks does not show or suggest the invention of claim 30 or claims 31-43 which depend therefrom.

CONCLUSION

In light of the above remarks, claims 1-8, 10-14, and 16-43 are patentable over the cited art. Reconsideration and allowance of the claims is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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